

# EFFICIENT USE OF LAND

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## Why Density?



# EFFICIENT USE OF LAND

## Urban Charm



# EFFICIENT USE OF LAND

## Arcadian Rural Ideal



# EFFICIENT USE OF LAND

## Sprawl



# EFFICIENT USE OF LAND

## Density Ranges



Broader Density Range



Narrower Density Range

# EFFICIENT USE OF LAND

## Workplace Typologies



# EFFICIENT USE OF LAND

## Scaling 50,000 Jobs

**BLOCK METHOD GROSS LAND USE QUANTIFICATION PAGES 1 (SEE UNITS RISE-H-555E + BALANCE CORPORATE AND DOWNTOWN JOBS)**

net/gross ratio: 1.25 | jobs from mixed use development: 1170,000 jobs  
 lot size: 20000 sq ft | Parking of per vehicle: 3.5 | Parking Spaces per job: 1.00 jobs

**Workplace Typology**

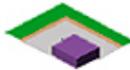
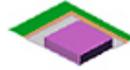
Use Subcategory	Building Area (sq ft)	Jobs	sqm surf / job	Acreage	Sq. Foot	sqm	GROSS/ACR	SPREAD/ACR	NET DCR	park stb	park stb/sq	park surf	green surf	tree surf	# of trees	park stb/acre	tree stb/acre	park stb/acre	tree stb/acre		
<b>TOTAL:</b>		<b>51226</b>		<b>764</b>	<b>6637</b>											<b>1260</b>		<b>567</b>			
1 Corporate/Tech Office (4 story with 2 story parking with an FAR of 6 and an impervious surface of 100%; 218 of impervious per job)	200000	10000	218.301	77	1826	200	0.8	1.275	0.765	300	4	18%	57%	17%	7%	151	2	60.01708533	12	48	10
2 Corporate/Tech Office (8 story with 4 story parking with an FAR of 1.2, and an impervious surface of 83%; 159 of impervious per job)	200000	10000	109.15	38	1291	200	1.2	1.275	1.53	300	0	18%	57%	17%	7%	65	4	30.00894206	12	96	30
3 Corporate/Tech Office (2 story with 1 story parking with an FAR of 20, and an impervious surface of 78%; 433 of impervious per job)	800000	3000	439.216	48	1454	200	0.28	1.275	0.357	300	2	18%	54%	22%	7%	84	1	38.58205828	12	24	0
4 R&D Lab (1 story with 1 story parking with an FAR of 3, and an impervious surface of 82%; 655 of impervious per job)	4800000	18000	654.900	344	3873	300	0.3	1.275	0.3825	300	1	38%	38%	17%	7%	688	1	278.986484	18	18	0
5 Destination retail/entertainment (1 story with 1 story parking with an FAR of 355 and an impervious surface of 66%; 952 of impervious per job)	800000	1900	952.327	50	1187	600	0.365	1.275	0.4528	750	1	45%	34%	14%	7%	55	2	25.36988996	20	22	10
6 Downtown Professional Service Office (30 story with 4 story parking with an FAR of 2 and 83% impervious surface; 65 of impervious per job)	400000	2000	64.8600	5	447	200	2	1.275	2.55	196	20	13%	63%	17%	7%	8	4	3.68107312	12	240	36
7 Downtown Professional Service Office (4 story with 2 story parking with an FAR of 0.8 and an impervious surface of 83%; 218 of impervious per job)	200000	1000	218.301	8	577	200	0.8	1.275	0.765	300	4	18%	57%	17%	7%	151	2	60.01708533	12	48	10
8 Downtown Professional Service Office (8 story with 4 story parking with an FAR of 1.2 and an impervious surface of 83%; 106 of impervious per job)	200000	1000	109.15	4	488	200	1.2	1.275	1.53	300	0	18%	57%	17%	7%	7	4	3.00894206	12	96	30
9 Light Industrial (1 story with surface parking with an FAR of 36 and an impervious surface of 78%; 978 of impervious per job)	800000	1200	978.431	38	1339	600	0.34	1.275	0.4485	1	1	45%	27%	22%	7%	67	1	30.88834103	18	18	0
10 Manufacturing (1 story with surface parking with an FAR of 10 and an impervious surface of 70%; 468 of impervious per job)	750000	6000	467.992	108	2185	120	0.18	1	1	300	1	20%	49%	24%	7%	104	1	94.48015125	16	16	0
11 IBM Facility-Information Pending	0.000001	0.00001	0.480078	0	0	0.1	0.1	1.275	0.1275	300	1	13%	38%	46%	0%	0	1000	1.88054E-10	10		
12 Capital/Retail/Power Plant Information Pending	0.000001	0.00001	0.480078	0	0	0.1	0.1	1.275	0.1275	300	1	13%	38%	46%	0%	0	1000	1.88054E-10	10		

**EXAMPLE**



# EFFICIENT USE OF LAND

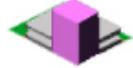
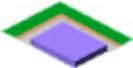
## Scaling 50,000 Jobs

	Workplace Typology			Use Subcategory
	Example	3D Icon	Plan Icon	TOTAL
1				Corporate/Tech Office (4 story with 2 story parking) with an FAR of .6, and an impervious surface of 83%; 218 sf impervious per job
2				Corporate/Tech Office (8 story with 4 story parking) with an FAR of 1.2, and an impervious surface of 83%; 109 sf impervious per job
3				Corporate/Tech Office (2 story with 1 story parking) with an FAR of .28, and an impervious surface of 78%; 430 sf impervious per job
4				R&D/Lab (1 story with 1 story parking) with an FAR of .3, and an impervious surface of 83%; 655 sf impervious per job
5				Destination retail/entertainment (1 story with 1 story parking) with an FAR of .355 and an impervious surface of 86%; 952 sf impervious per job

**EXAMPLE**

# EFFICIENT USE OF LAND

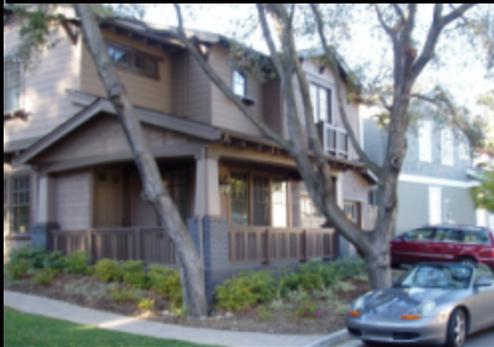
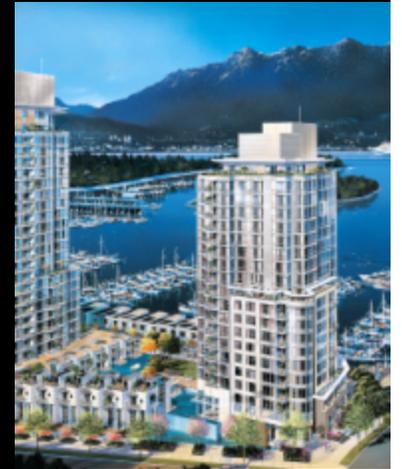
## Scaling 50,000 Jobs

	Workplace Typology			Use Subcategory
	Example	3D Icon	Plan Icon	TOTAL
6				Downtown Professional Service Office (20 story with 4 story parking) with an FAR of 2 and 83% impervious surface; 65 sf impervious per job
7				Downtown Professional Service Office (4 story with 2 story parking) with an FAR of 0.6 and an impervious surface of 83%; 218 sf impervious per job
8				Downtown Professional Service Office (8 story with 4 story parking) with an FAR of 1.2 and an impervious surface of 83%; 109 sf impervious per job
9				Light Industrial (1 story with surface parking) with an FAR of .35 and an impervious surface of 78%; 878 sf impervious per job
10				Manufacturing (1 story with surface parking) with an FAR of .16 and an impervious surface of 76%; 468 sf impervious per job

**EXAMPLE**

# EFFICIENT USE OF LAND

## Residential Typologies



# EFFICIENT USE OF LAND

## Scaling 25,000 Homes

**BLOCK METHOD GROSS LAND USE QUANTIFICATION CASE: 1 (SEE UNITS SEE HI-RISE + BALANCE CORPORATE AND DOWNTOWN JOBS)**

Homes in mixed use developments: 1284 (0.05%)

Lot size: 20,000 sq ft

Home footprint ratio: 80%

25,000 (MINIMUM) HOMES

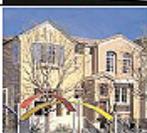
Residential Typology			Use Subcategory	Homeid gross area	Homeid area	Homes	Coverage	St. Dens	all home	Gross FGR	Gross Net Floor	NET FGR	plg surf/lot area	plg surf	green surf	misc surf	of lots	plg stories	lot area in terms of bldg footprints	plg stories			
Example	3D Icon	Site Icon	NOTES			28288	1371	7441									2171		997				
1			Highrise: 100 homes/acre with an impervious surface of 77%	100	127.5	800	0	580	2200	6.421916	1.275	0.156559	600	22	37% in bldg	23%	43%	14	6.275	12	254		
2			8 Story Midrise: 75 homes/acre with an impervious surface of 89%	75	95.625	1200	16	605	1400	3.445625	1.275	4.3805	600	9	48% in bldg	11%	43%	27	12.58	12	195		
3			4 story frame apartment: 45 homes/acre with an impervious surface of 83%	45	67.375	8000	133	2419	1400	2.986116	1.275	2.6343	600	6	63% in bldg	11%	39%	228	104.8	12	80		
4			3 story frame rowhouse plg: 30 homes/acre with an impervious surface of 80%	30	36.25	2000	67	1754	1100	0.757576	1.275	0.96691	520	3	32%	36%	12%	20%	116	1	52.29	11	33
5			3 story Towns: 22 homes/acre with an impervious surface of 83%	22	28.05	8000	273	3447	1000	1.25	1.275	1.55375	670	3	53% in bldg	11%	39%	466	213.9	11	33		
6			DF detached edge estate: 5 homes/acre with an impervious surface of 49%	5	6.375	300	90	1617	4000	3.526286	1.275	0.67101	580	1.75	0% in bldg	52%	19%	102	47.06	11	19.25		
7			DF detached: 14 homes/acre with an impervious surface of 65%	14	17.95	3700	264	3383	1000	0.709679	1.275	0.90395	430	2.6	35% in bldg	36%	39%	481	207.3	11	26.6		
8			DF detached: 12 homes/acre with an impervious surface of 65%	12	16.3	3000	250	3300	2100	0.890909	1.275	1.275	430	2.2	42% in bldg	36%	29%	427	198.1	11	24.2		
9			DF detached: 10 homes/acre with an impervious surface of 64%	10	12.75	2000	293	2562	2000	0.91271	1.275	0.87855	490	2	44% in bldg	36%	29%	342	156.9	11	22		

**EXAMPLE**



# EFFICIENT USE OF LAND

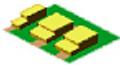
## Scaling 25,000 Homes

	Residential Typology			Use Subcategory
	Example	3D Icon	Plan Icon	TOTAL
1				Highrise: 100 homes/acre with an impervious surface of 77%
2				9 Story Midrise: 75 homes/acre with an impervious surface of 89%
3				4 story frame o/podium: 45 homes/acre with an impervious surface of 83%
4				3 story frame w/surface pkg: 30 homes/acre with an impervious surface of 88%
5				3 story Towns: 22 homes/acre with an impervious surface of 83%

**EXAMPLE**

# EFFICIENT USE OF LAND

## Scaling 25,000 Homes

	Residential Typology			Use Subcategory
	Example	3D Icon	Plan Icon	TOTAL
6				SF detached edge estate: 5 homes/acre with an impervious surface of 48%
7				SF detached: 14 homes/acre with an impervious surface of 65%
8				SF detached: 12 homes/acre with an impervious surface of 65%
9				SF detached: 10 homes/acre with an impervious surface of 64%

**EXAMPLE**

# EFFICIENT USE OF LAND

## Supporting 25,000 Homes and 50,000 Jobs

**BLOCK METHOD GROSS LAND USE QUANTIFICATION PILES 1 | MIXED USE HIGH-RISE + BALANCE CORPORATE AND DOWNTOWN JOBS**

**Residential Typology Based POPULATION**

Residential Typology			TOTAL	Acres of gross area	Acres of impervious	Residents per home	Population 21,250 children residents 18,000 of groups	children per home by typology	children by typology	8-12 students	K-12 students	7-8 students	10-12 students	K-12 students	K-12 students	
Example	3D Icon	Plan Icon														
1			Highrise: at 2.2 residents per home and 3.1 children per home; 120 of impervious per resident	180	800	118,868	2.2	1780	373.12	0.1	80	67.776	31.1111	13.3333	13.3333	148.08
2			8 story midrise: at 2.2 residents per home and .25 children per home; 184 of impervious per resident	75	1200	183,834	2.2	2640	558.88	0.25	330	216.60	118.867	50	50	219.12
3			4 story frame podium: at 2.2 residents per home and .5 children per home; 288 of impervious per resident	45	6900	285,348	2.2	10200	2798.4	0.3	1890	1300	700	390	390	1095.6
4			3 story frame w/surface pkg: at 2.2 residents per home and .75 children per home; 678 of impervious per resident	30	2900	676,648	2.2	4490	952.8	0.75	1590	1985.3	589.335	250	250	368.2
5			Townhome: at 2.7 residents per home and .5 children per home; 478 of impervious per resident	22	6900	478,106	2.7	10290	3434.4	0.5	3090	2166.7	1189.67	590	590	1344
6			SF detached edge estate: at 3.39 residents per home and .85 children per home; 974 of impervious per resident	5	300	674,623	3.39	1847	215.8	0.85	255	184.17	96.1667	42.5		
7			SF detached: at 3.58 residents per home and .75 children per home; 656 of impervious per resident	54	3700	488,128	3.58	12543	3628.1	0.75	2775	2904.2	1079.17			1561.07
8			SF detached: at 3.58 residents per home and .85 children per home; 645 of impervious per resident	52	3000	545,841	3.58	10170	2158	0.85	2550	1841.7	86	425	425	844.11
9			SF detached: at 3.58 residents per home and .85 children per home; 644 of impervious per resident	50	2900	644,737	3.58	6780	1437.4	0.85	1730	1437.4	111	289.333	289.33	602.74
Mixed Use Typologies				veries	1298		2.2	2833.8	800.72	0.25	320	175.222	63.8889	63.8887	63.8887	236.188

**EXAMPLE**

# EFFICIENT USE OF LAND

## Supporting 25,000 Homes and 50,000 Jobs

BLOCK METHOD GROSS LAND USE QUANTIFICATION FILES 1 | 100 UNITS RISE-H-RISE + BALANCE CORPORATE AND DOWNTOWN JOBS

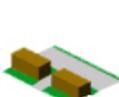
Residential Typology Based POPULATION

Residential Typology	Minimum gross area	Homes	sq ft impervious	Residents per home	Population 21.2% children (under 18) 10.1% 65+ seniors	children/home by typology	children by typology	k-12 students	k-5 students	7-8 students	10-12 students	0-2% Generators (G) Credits	
		29288			71543.6	15167							
1 Highrise: at 2.2 residents per home and 3.1 children per home; 120 of impervious per resident	100	800	119,869	2.2	1780	373.12	0.1	80	87,778	31,111	15,393	13,335	168,08
2 8 story Midrise: at 2.2 residents per home and .25 children per home; 184 of impervious per resident	70	1300	183,954	2.2	2840	558.88	0.25	330	216,67	118,867	50	50	219.12
3 4 story frame opodium: at 2.2 residents per home and .5 children per home; 205 of impervious per resident	45	6000	285,348	2.2	13200	2798.4	0.3	1800	1300	700	300	300	1056.6
4 3 story frame w/surface pkg: at 2.2 residents per home and .75 children per home; 678 of impervious per resident	30	2000	675,648	2.2	4400	892.8	0.75	1500	1800.3	580.305	250	250	368.2
5 Towns: at 2.7 residents per home and .5 children per home; 478 of impervious per home	22	6000	478,105	2.7	16200	3434.4	0.5	3080	2168.7	1189.07	530	530	134.4
6 SF detached edge on lots: at 3.39 residents per home and .85 children per home; 978 of impervious per resident	5	300	674,623	3.39	1017	215.8	0.85	350	184.17	90.1667	42.0		
7 SF detached: at 3.58 residents per home and .75 children per home; 656 of impervious per resident	14	3700	489,129	3.58	12543	2659.1	0.75	2275	2804.2	1079.11			1641.07
8 SF detached: at 3.58 residents per home and .85 children per home; 645 of impervious per resident	12	3000	545,941	3.58	10170	2158	0.85	2550	194.17	90.1667	42.0	42.0	844.11
9 SF detached: at 3.58 residents per home and .85 children per home; 644 of impervious per resident	10	2900	644,737	3.58	10780	1437.4	0.85	170	110.111	269.333	289.33	842.74	
		1298		2.2	2833.6	600.72	0.25	322	136.222	63.8887	53.887	236.189	

**EXAMPLE**

# EFFICIENT USE OF LAND

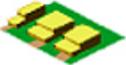
## Supporting 25,000 Homes and 50,000 Jobs

Residential Typology Based POPULATION				Use Subcategory
	Example	3D Icon	Plan Icon	TOTAL
1				Highrise: at 2.2 residents per home and 0.1 children per home; 120 sf impervious per resident
2				9 Story Midrise: at 2.2 residents per home and .25 children per home; 184 sf impervious per resident
3				4 story frame o/podium: at 2.2 residents per home and .3 children per home; 285 sf impervious per resident
4				3 story frame w/surface pkg: at 2.2 residents per home and .75 children per home; 676 sf impervious per resident
5				Towns: at 2.7 residents per home and 1.5 children per home; 478 sf impervious per resident

**EXAMPLE**

# EFFICIENT USE OF LAND

## Supporting 25,000 Homes and 50,000 Jobs

Residential Typology Based POPULATION			Use Subcategory	
Example	3D Icon	Plan Icon	TOTAL	
6				SF detached edge estate: at 3.39 residents per home and .85 children per home; 974 sf impervious per resident
7				SF detached: at 3.39 residents per home and .75 children per home; 466 sf impervious per resident
8				SF detached: at 3.39 residents per home and .85 children per home; 545 sf impervious per resident
9				SF detached: at 3.39 residents per home and .85 children per home; 644 sf impervious per resident

**EXAMPLE**

# EFFICIENT USE OF LAND

## Supporting 25,000 Homes and 50,000 Jobs Schools, Fire Stations, Libraries, Parks, Churches

BLOCK METHOD GROSS LAND USE QUANTIFICATION-PASS 1 (800 UNITS RISE HIGH-RISE + BALANCE CORPORATE AND DOWNTOWN JOBS)									
Residential Unit or Population Based Public Facilities									
<b>SCHOOLS</b>									
	Student/ School	Population	Number of Schools	acres/school	Dt. Bon	Total acreage	Urban acreage	Total urban acreage	Note: School age day care is assumed to be accommodated within the school grounds and thus not considered as a separate land requirement.
4 Thru 6	600	6000	1	6.0	600	60	70%	42.0	% Impervious (Std.) = 40%
7 Thru 9	1200	2400	2	2.0	933.301	46.6		46.6	% Impervious (Urban) = 20%
10 Thru 12	2400	2400	1	1.0	1320	46	14	27.6	
<b>PRE-SCHOOL</b>									
Population	71543.80018		Number of years in pre-school	2		Number of students per school	55	Urban acreage	50%
			Candidate pre-school population	1431		Number of preschools	18		% Impervious (Std.) = 40%
			% in pre-school	85%		Land required/pre-school	0.78 acre	Urban Land required/pre-school	% Impervious (Urban) = 20%
			pre-school population	607		total land required	14 acre	Total urban land required	
<b>POLICE</b>									
Population	71543.80018		Officers per 1000 pop	1.5		Urban Acreage	0.25	% Impervious (Std.) = 80%	
			Officers	40		Police facility	0.125 acre	% Impervious (Urban) = 95%	
			Vehicles per officer	0.5125					
			Vehicles	16					
			Community Police Facility	2000 sf		on	0.05 acre		
<b>FIRE</b>									
Population	71543.80018		North Coyote Station	11000 sf on		Urban Acreage	50%	% Impervious (Std.) = 80%	
Station/population	20000		Mid Coyote Station 1	6000 sf on		0.5 acre		% Impervious (Urban) = 85%	
Station	3		Mid Coyote Station 2	6000 sf on		0.5 acre			
<b>LIBRARY</b>									
Population	71543.80018		Average per Library	1 acre		Urban acreage	25%	% Impervious (Std.) = 90%	
Libraries/population	30000		Total Library acreage	2 acre		Urban acreage per Library	0.25 acre	% Impervious (Urban) = 95%	
# Libraries	2					total urban acreage	0.5 acre		
<b>COMMUNITY CENTERS</b>									
Population	71543.80018		Distribution of community center footage			Urban Acreage	80%	% Impervious (Std.) = 70%	
Community center w/population	60000		0.6: Central Community Fair center	1	60000	of on	6.5 acres		% Impervious (Urban) = 80%
			Neighborhood community centers (1 when school & Post. Swims centers)	6.9	2500	of on	2.25 acres ea	13.88 total acres	
Required City Community Centers	35772							12.4958 total urban acres	
<b>NEIGHBORHOOD &amp; COMMUNITY PARKS</b>									
Population	71544		Distribution/suggested facilities			Urban Acreage	80%	% Impervious (Std.) = 50%	
Acres/1000 residents	3.33		Community Parkland	190	acres	with	100	35.0 ballfield acres	% Impervious (Urban) = 50%
Acres	250		Neighborhood park	20	acres		62.5	ballfield acres	% Impervious (Std.) = 25%
			Neighborhood Parks (5 acre min)	50	acres				% Impervious (Urban) = 25%
			Community Gardens	6	acres				% Impervious (Std.) = 25%
			Park maintenance	2	acres				% Impervious (Urban) = 70%
			Central Civic Plaza	4	acres				% Impervious (Std.) = 80%
			Swims complex w/ 50 meter pool on	4	acres				% Impervious (Urban) = 80%
			Remainder	-3.99	acres				% Impervious (Std.) = 80%
									% Impervious (Urban) = 80%
<b>CHURCHES</b>									
Population	71544		Number of Churches	13.00		Total area	48	% Impervious	80%
			Suburban area req'd	4.30	acres ea	56		Urban Area	70%
			Urban Area Req'd	2.50	acres ea	25			

**EXAMPLE**

# EFFICIENT USE OF LAND

## Schools

SCHOOLS										
		acreage/ school	Sq. Box	Total acreage	Urban acreage		70%	Total urban acreage		
k Thru 6		10	660	69			7	48.6		
7 Thru 9		20	933.381	40			14	27.8		
10 Thru 12		40	1320	40			28	27.8		
							Std. Acres	Imp. Acres	Urban Acres	Imp. Acres
Community/school facility reserve							25	20	20	15

**EXAMPLE**

# EFFICIENT USE OF LAND

## Fire and Library

SCHOOLS									
	acreage/ school	Sq. Box	Total acreage	Urban acreage		70%	Total urban acreage		
k Thru 6	10	660	69			7	48.6		
7 Thru 9	20	933.381	40			14	27.8		
10 Thru 12	40	1320	40			28	27.8		
Community/school facility reserve						Std. Acres	Imp. Acres	Urban Acres	Imp. Acres
						25	20	20	15

FIRE									
						Urban Acreage		50%	
Population	North Coyote Station	11000 sf on			1 acre	North Coyote Station		0.5 acre	
Sations/population	Mid Coyote Station 1	9000 sf on			0.5 acre	Mid Coyote Station 1		0.25 acre	
Stations	Mid Coyote Station 2	9000 sf on			0.5 acre	Mid Coyote Station 2		0.25 acre	
LIBRARY									
Population	Acreage per Library	1 acre				Urban acreage		25%	
Libraries/population	Total Library acreage	2 acre				Urban acreage per Library		0.25 acre	
# Libraries						total urban acreage		0.5 acre	

**EXAMPLE**

# EFFICIENT USE OF LAND

## Parks

### SCHOOLS

	acreage/ school	Sq. Box	Total acreage	Urban acreage	70%	Total urban acreage			
k Thru 6	10	660	69		7	48.6			
7 Thru 9	20	933.381	40		14	27.8			
10 Thru 12	40	1320	40		28	27.8			
Community/school facility reserve						Std. Acres	Imp. Acres	Urban Acres	Imp. Acres
						25	20	20	15

### FIRE

				Urban Acreage	50%
Population	North Coyote Station	11000 sf on	1 acre	North Coyote Station	0.5 acre
Stations/population	Mid Coyote Station 1	9000 sf on	0.5 acre	Mid Coyote Station 1	0.25 acre
Stations	Mid Coyote Station 2	9000 sf on	0.5 acre	Mid Coyote Station 2	0.25 acre

### LIBRARY

				Urban acreage	25%
Population	Acreage per Library	1 acre			
Libraries/population	Total Library acreage	2 acre		Urban acreage per Library	0.25 acre
# Libraries				total urban	0.5 acre

**EXAMPLE**

### NEIGHBORHOOD & COMMUNITY PARKS

Population	71544	Distribution/suggested facilities	
Acres/1000 residents	3.5	Community Parkland	150 acres
Acres	250	Festival park	20 acres
		Neighborhood Parks (5 acre min)	50 acres
		Community Gardens	5 acres
		Park maintenance	2 acres
		Central Civic Plaza	3 acres
		Swim complex w/ 50 meter pool on	5 acres
		Remainder	-3.99



# EFFICIENT USE OF LAND

## Retail

RETAIL			
Population		71544	
Households		26288	
Retail Typology	Expenditures per Household	Local Capture Rate	Total Expenditures
Supermarket	\$ 4,524	80%	\$ 118,926,912
Gasoline	\$ 1,927	50%	\$ 50,656,976
Restaurants	\$ 4,350	40%	\$ 114,352,800
General Retail	\$ 5,000	30%	\$ 131,440,000
Personal Services	\$ 775	40%	\$ 20,373,200
Apparel	\$ 3,469	30%	\$ 91,193,072
Cinema	\$ 1,364	20%	\$ 35,856,832
Selectedf totals			\$ 562,799,794

**EXAMPLE**

# EFFICIENT USE OF LAND

## Retail

RETAIL			
Population			71544
Households			26288
Retail Typology	Expenditures per Household	Local Capture Rate	Total Expenditures
Supermarket	\$ 4,524	80%	\$ 115,912
Gasoline	\$ 1,927	50%	\$ 47,976
Restaurants	\$ 4,350	40%	\$ 112,800
General Retail	\$ 5,000	30%	\$ 126,000
Personal Services	\$ 775	40%	\$ 20,373,200
Apparel	\$ 3,469	30%	\$ 91,193,072
Cinema	\$ 1,364	20%	\$ 35,856,832
Selectedf totals			\$ 562,799,794

**EXAMPLE**

Local						Regional		
Local Expenditures	Sales / sqft	Supportable sqft	Avg. sqft / store	Total Store	Non Local Expenditures	Non Local sqft	Regional Stores	
\$ 95,141,530	\$ 500	190283	60000	3	\$ 23,785,382	47570.76	1	
\$ 25,328,488	\$ 2,500	10131	2000	5	\$ 25,328,488	10131.4	5	
\$ 45,741,120	\$ 350	130689	4500	29	\$ 68,611,680	196033.4	44	
\$ 39,432,000	\$ 350	112663	3500	32	\$ 92,008,000	262880	75	
\$ 8,149,280	\$ 200	40746.4	1500	27	\$ 12,223,920	61119.6	41	
\$ 27,357,922	\$ 350	78165	5000	16	\$ 63,835,151	182386.1	36	
\$ 7,171,366	\$ 250	28685	4000	7	\$ 28,685,466	114741.9	29	
\$ 248,321,706		591,364		119	\$ 314,478,087	874,863	230	

# EFFICIENT USE OF LAND

## Infrastructure

TRUNK INFRASTRUCTURE										
Major Roads:	ROW width (ft)	Approx. Length	Average	% Impervious	Imperv. Acres	Multi-Modal Transit Hub	Average	% Imp	Imp Acres	
Montarey Hwy	120	19000		52.3	98%	42	3 Story Parking structure for 3000 cars	0.89	3.30	6.54
Bailey Ave.	120	19800		54.5	98%	44	Vehicle circulation	1.41	0.8	1.13
Santa Teresa	120	10900		27.5	98%	22	Transit Platform	1	0.8	0.86
EastMont collector 1	80	7900		12.9	98%	10	PatMond	1.54	0.1	0.58
EastMont collector 2	80	7900		12.9	98%	10				
EastMont collector 3	80	3000		6.6	98%	4				
EastMont collector 4	80	3000		6.6	98%	4				
Standard street	52				98%					
Railroad	85	19000		37.1	98%	19				
Bailey/Montarey RR overcross				12.83	98%	10				
Coyote Creek/Montarey RR overcross				12.83	98%	10				
North/Montarey RR overcross				12.83	98%	10				
Total:				242.1		196.0				

**EXAMPLE**

# EFFICIENT USE OF LAND

## Infrastructure

TRUNK INFRASTRUCTURE						
Major Roads:	ROW width(ft)	Approx. Length (ft)	Acreage		% Impervious	Imperv. Acres
Monterey Rd	150	19000		65.4	80%	52
Bailey Ave.	130	19800		59.1	80%	47
Santa Teresa	140	10000		32.1	80%	26
East/west collector 1	106	7000		17.0	80%	14
East/west collector 2	106	7000		17.0	80%	14
East/west collector 3	106	3000		7.3	80%	6
East/west collector 4	106	3000		7.3	80%	6
Standard street	60				90%	
Railroad	85	19000		37.1	50%	19
Bailey/Monterey/RR overcross				12.63	80%	10
Coyote Creek/Monterey/RR overcross				12.63	80%	10
North/Monterey/RR overcross				12.63	80%	10
Total				280.3		13.1

**EXAMPLE**

# EFFICIENT USE OF LAND

## Environmental Footprint Reserves

ENVIRONMENTAL RESERVES		Retention/Determination/Water Quality/Quality Recharge											
		100 yr volumes											
Urban Development		Gross Acreage	Post Development Impervious %	Developed Area Surface	100 yr Urban Storm Water Volume	100 yr Volume as % of impervious	75 yr Volume	75 yr Volume as % of impervious	50 yr Volume	50 yr Volume as % of impervious	25 yr Volume	25 yr Volume as % of impervious	
North Coyote CVRP		1871	68%	81%	280,000 acre ft	0.37%	84.2	0.08%	148.3	0.16%	176.0	0.20%	
Mid Coyote		2581	68%	100%	361 acre ft	0.32%	88.8	0.27%	156.8	0.14%	200.0	0.18%	
South Coyote		3429	0	0	0	0.32%	0.2	0.13%	0.1	0.16%	0.0	0.0	
Flood Blue Area		Floodplain area											
North Coyote CVRP		772			100 yr Floodplain Retention Volume	172.166 acre ft	2.20	acre ft	389	acre ft	484	acre ft	
Mid Coyote		581			100 yr Floodplain Retention Volume	581	acre ft	150	acre ft	255	acre ft	316	acre ft
South Coyote		585			100 yr Floodplain Retention Volume	585	acre ft	168	acre ft	270	acre ft	340	acre ft
Potential Wetlands		Total	Outside Floodplain	Within Floodplain									
North Coyote CVRP		18	16	0									
Mid Coyote		30	10	20									
South Coyote		5	0	5									
Oak Savanna													
North Coyote CVRP		84	96	0									
Mid Coyote		30	30	0									
South Coyote		5	0	5									
Species of Concern													
Burrowing Owl													
North Coyote CVRP		1	1	0									
Mid Coyote		0	0	0									
South Coyote		0	0	0									
Burrowing Owl Potential													
North Coyote CVRP		0	3	0									
Mid Coyote		0	0	0									
South Coyote		0	0	0									
Tiger Salamander													
North Coyote CVRP		1	1	0									
Mid Coyote		0	0	0									
South Coyote		0	0	0									
Great-tailed Grackle													
North Coyote CVRP		0	0	0									
Mid Coyote		0.5	0	0.5									
South Coyote		0	0	0									
Debarbs		112 acres											
Pocket Parks		151.44 acres, at 1 acre per 200 DU, 20% impervious											

**EXAMPLE**

# EFFICIENT USE OF LAND

## Environmental Footprint Reserves

### URBAN DEVELOPMENT AREA

Developed Acre Impervious Surface	100 yr. Urban Runoff detention volume		100 yr Volume as depth of impervious		2 yr Volume	2 yr Volume as depth of impervious		5 yr Volume	5 yr Volume as depth of impervious		10 yr Volume	10 yr Volume as depth of impervious		25 yr Volume	25 yr Volume as depth of impervious
879	280.558	acre ft	0.32 ft.		84.2	0.096 ft.		140.3	0.16 ft.		176.0	0.20 ft.		219.3	0.25 ft.
1100	351	acre ft	0.32 ft.		80.6	0.07 ft.		150.8	0.14 ft.		200.2	0.18 ft.		260.0	0.24 ft.
0			0.32 ft.		0.0	0.10 ft.		0.0	0.16 ft.		0.0	0.20 ft.		0.0	0.25 ft.

**EXAMPLE**

# EFFICIENT USE OF LAND

## Environmental Footprint Reserves

### URBAN DEVELOPMENT AREA

Developed Acre Impervious Surface	100 yr. Urban Runoff detention volume		100 yr Volume as depth of impervious		2 yr Volume	2 yr Volume as depth of impervious		5 yr Volume	5 yr Volume as depth of impervious		10 yr Volume	10 yr Volume as depth of impervious		25 yr Volume	25 yr Volume as depth of impervious	
879	280,558	acre ft	0.32	ft.	84.2	0.096	ft.	140.3	0.16	ft.	176.0	0.20	ft.	219.3	0.25	ft.
1100	351	acre ft	0.32	ft.	80.6	0.07	ft.	150.8	0.14	ft.	200.2	0.18	ft.	260.0	0.24	ft.
0			0.32	ft.	0.0	0.10	ft.	0.0	0.16	ft.	0.0	0.20	ft.	0.0	0.25	ft.

### FLOOD PLAIN AREA

100 yr. Floodplain detention volume	2 yr. Floodplain detention volume	5 yr. Floodplain detention volume	10 yr. Floodplain detention volume	25 yr. Floodplain detention volume
772.18	232	386	484	604
acre ft.	acre ft.	acre ft.	acre ft.	acre ft.
507	152	253	318	396
acre ft.	acre ft.	acre ft.	acre ft.	acre ft.
550	165	275	345	430
acre ft.	acre ft.	acre ft.	acre ft.	acre ft.

**EXAMPLE**

# EFFICIENT USE OF LAND

## Environmental Footprint Reserves

### URBAN DEVELOPMENT AREA

Developed Acre Impervious Surface	100 yr. Urban Runoff detention volume	100 yr Volume as depth of impervious	2 yr Volume	2 yr Volume as depth of impervious	5 yr Volume	5 yr Volume as depth of impervious	10 yr Volume	10 yr Volume as depth of impervious	25 yr Volume	25 yr Volume as depth of impervious
879	280.558 acre ft	0.32 ft.	84.2	0.096 ft.	140.3	0.16 ft.	176.0	0.20 ft.	219.3	0.25 ft.
1100	351 acre ft	0.32 ft.	80.6	0.07 ft.	150.8	0.14 ft.	200.2	0.18 ft.	260.0	0.24 ft.
0		0.32 ft.	0.0	0.10 ft.	0.0	0.16 ft.	0.0	0.20 ft.	0.0	0.25 ft.

### FLOOD PLAIN AREA

100 yr. Floodplain detention volume	2 yr. Floodplain detention volume	5 yr. Floodplain detention volume	10 yr. Floodplain detention volume	25 yr. Floodplain detention volume
772.18 acre ft.	232 acre ft.	388 acre ft.	484 acre ft.	604 acre ft.
507 acre ft.	152 acre ft.	253 acre ft.	318 acre ft.	396 acre ft.
550 acre ft.	165 acre ft.	275 acre ft.	345 acre ft.	430 acre ft.

**EXAMPLE**

Orchards	112 acres		
Pocket Parks	131.44 acres	at 1 acre per 200 D.U.	20% Impervious

# EFFICIENT USE OF LAND

## Scaling 25,000 Homes and 50,000 Jobs

ACREAGE SUMMARY					SET	Imp	Urban	Imp	
					Acres	Acres	Acres	Acres	
of Building	Workplace Typology	Totals			794	1202	588		
		200000 CorporateTech Office (4 story with 2 story parking) with an FAR of 8, and an impervious surface of 83%; 218 of impervious per job	0.6	77	131	65.0			
		200000 CorporateTech Office (6 story with 4 story parking) with an FAR of 1.2, and an impervious surface of 83%; 109 of impervious per job	1.2	38	66	32.5			
		800000 CorporateTech Office (2 story with 1 story parking) with an FAR of .28, and an impervious surface of 73%; 433 of impervious per job	0.28	48	94	38.8			
		450000 R&D Lab (1 story with 1 story parking with an FAR of .3, and an impervious surface of 83%; 698 of impervious per job	0.3	344	588	292.4			
		500000 Destination retail/entertainment (1 story with 1 story parking) with an FAR of .355 and an impervious surface of 86%; 952 of impervious per job	0.355	32	58	28.1			
		400000 Downtown Professional Service Office (20 story with 4 story parking) with an FAR of 2 and 83% impervious surface; 65 of impervious per job	2	5	8	3.9			
		200000 Downtown Professional Service Office (4 story with 2 story parking) with an FAR of 3.6 and an impervious surface of 83%; 218 of impervious per job	0.6	8	13	6.5			
		200000 Downtown Professional Service Office (8 story with 4 story parking) with an FAR of 1.2 and an impervious surface of 83%; 108 of impervious per job	1.2	4	7	3.2			
		800000 Light Industrial (1 story with surface parking) with an FAR of .36 and an impervious surface of 73%; 478 of impervious per job	0.36	38	67	31.8			
750000 Manufacturing (1 story with surface parking) with an FAR of .16 and an impervious surface of 70%; 488 of impervious per job	0.16	108	184	85.3					
of Workplace Building	Mixed Use Typology	Totals			78	118	48		
1000	Live work loft/condo	0.6	66	113	45.2				
288	402000 office with structured parking	3	4	6	2.5				
3.00061	3.001901	0	0.1	0	0.0				
3.00061	3.001901	0	0.1	0	0.0				
3.00061	3.001901	0	0.1	0	0.0				
3.00061	3.001901	0	0.1	0	0.0				
3.00061	3.001901	0	0.1	0	0.0				
3.00061	3.001901	0	0.1	0	0.0				
3.00061	3.001901	0	0.1	0	0.0				
Res Units	Res Units	Totals			1271	2171	923		
2200	800	Highrise: 105 homes/acre with an impervious surface of 77%	190	8	14	5.32			
1480	1200	3 Story Midrise: 75 homes/acre with an impervious surface of 89%	76	18	27	10.84			
1480	8000	4 story home villages: 45 homes/acre with an impervious surface of 83%	46	133	228	98.08			
of Building	Retail Typology	Totals			81	184	33		
100000	Supermarket	0.22	20	34	17.0				
10000	Gasoline	0.36	6	8	3.8				
130000	Restaurants	0.26	12	21	10.8				
112800	General Retail	0.35	16	18	8.8				
40000	Personal Services	0.35	4	6	3.3				
70000	Apparel	0.35	7	12	6.3				
20000	Camera	0.2	3	6	2.8				
Public Facilities	Totals			1130.9	386.2	1006.3	386.8		
Schools									
K-8				89.4	27.8	48.8	13.027022		
7-9				39.7	15.9	27.8	7.77676667		
10-12				39.7	15.9	27.8	7.77676667		
Pre-School				14	5.7	7.1	1.4282		
Police				0.6	0.4	0.105	0.11675		
Fire				2	1.6	1	0.85		
Library				1.89	1.59	0.58	0.4718965		
Community Center				19.39	13.59	17.48	10.47		
Parks									
Community Parkland				150	7.5	150	4.5		
Festival park				20	4	20	3		
Neighborhood Parks (5 acre min)				50	15	50	15		
Community Gardens				5	1	5	1		
Park maintenance				2	1.4	2	1.4		
Central Civic Plaza				3	1.9	3	1.9		
Swim complex w/ 50 water pool on				5	4	5	4		
Trunk Infrastructure									
Roads & Pk				248.1	189.6	248.1	189.8		
Transit Hub				16	9	16	9		
Environmental Reserve (Double Floodplains)									
Potential Wetlands				20	20	0	0		
Oak Savanah				115	115	0	0		
Burrowing Owl				1	1	0	0		

**EXAMPLE**

# EFFICIENT USE OF LAND

## Scaling 25,000 Homes and 50,000 Jobs

	Gross FAR	Acreage	Blocks	Impervious Acres
<b>Workplace Typology</b>				
Totals		704	1202	589
Corporate/Tech Office (4 story with 2 story parking) with an FAR of .6, and an impervious surface of 83%;218 sf impervious per job	0.6	77	131	65.0

**EXAMPLE**

# EFFICIENT USE OF LAND

## Scaling 25,000 Homes and 50,000 Jobs

	Gross FAR	Acreage	Blocks	Impervious Acres
<b>Workplace Typology</b>				
Totals		704	1202	39
Corporate/Tech Office (4 story with 2 story parking) with an FAR of .6, and an impervious surface of 83%;218 sf impervious per job	0.6	77		65.0

**EXAMPLE**

		Std. Acres	Imp Acres	Urban Acres	Imp Acres
<b>Public Facilities</b>					
Totals		1130.9	386.2	1039.3	306.9
<b>Schools</b>					

# EFFICIENT USE OF LAND

## Scaling 25,000 Homes and 50,000 Jobs

	Gross FAR	Acreage	Blocks	Impervious Acres
Mixed Use Typology				
Totals		70	119	48

**EXAMPLE**

# EFFICIENT USE OF LAND

## Scaling 25,000 Homes and 50,000 Jobs

	Gross FAR	Acreage	Blocks	Impervious Acres
Mixed Use Typology				
Totals		70	119	48

	Units/acre	Acreage	Blocks	Impervious Acres
Residential Typology				
Totals		1271	2171	983

**EXAMPLE**

# EFFICIENT USE OF LAND

## Scaling 25,000 Homes and 50,000 Jobs

	Gross FAR	Acreage	Blocks	Impervious Acres
Mixed Use Typology				
Totals		70	119	48

	Units/acre	Acreage	Blocks	Impervious Acres
Residential Typology				
Totals		1271	2171	983

**EXAMPLE**

	Gross FAR	Acreage	Blocks	Impervious Acres
Retail Typology				
Totals		61	104	53

# EFFICIENT USE OF LAND

## Scaling 25,000 Homes and 50,000 Jobs

PRE-DETENTION ACREAGE TOTALS	STD	IMPREVIOUS	URBAN	IMPERVIOUS
	3236	2058	3145	1979
<b>ACTUAL ACRES IN NORTH AND MID COYOTE</b>	<b>3761.52</b>			
Remainder for Retention/detention/water quality/aquifer recharge	525		617	
URBAN DEVELOPMENT WITH DETENTION STRATEGY net acres	259		259	
Net planning margin	266	7%	358	10%

**EXAMPLE**

# EFFICIENT USE OF LAND

## EFFICIENT USE OF LAND

